

TRAVELING EXHIBITS PROGRAM

National Aeronautics
and Space Administration

Langley Research Center
Hampton, Virginia 23681-2199



Wind Tunnel Exhibit

Wind Tunnels

In simplest form, wind tunnels consist of an enclosed passageway - hence the term "tunnel" - through which air is pushed by one or more fans. Depending upon design, and whether outside air or another gas is used, the air flowing through wind tunnels has certain properties of speed, density and temperature. In order to mimic in-flight conditions and monitor a wide range of an aircraft's physical reactions to those conditions, researchers mount and instrument models in the wind tunnel's heart, the test section. There, air or gas is made to flow around the (usually) stationary model.



This mockup exhibit demonstrates the attributes and advantages of wind tunnels. Viewers are introduced to the history of these remarkable instruments and their presence at NASA Langley Research Center through a looped video. At the back of the exhibit, a fan spins while a stationary model mimics the workings of a wind tunnel.

Specifications:

color: silver/perforated metal

dimensions: 9 ft high x 8 ft wide x 10 ft long

components: 42 inch flat screen monitor, looped video, VCR, PAV (personal air vehicle) model, carpet

crate dimensions: 41"w x 73"h x 57"d, 500 lbs

98"w x 50"h x 44"d, 1,054 lbs

50"w x 44"h x 99"d, 494 lbs

50"w x 52"h x 91"d, 978 lbs

installation: 2 people, 5 hours

value: \$55,865

rental fee: none (borrower responsible for shipping and insurance)

transportation: air ride equipped

available for long term loan

For more information contact:
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